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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,700

12/04/2007

Thomas Kruse

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BACHMAN & LAPOINTE, P.C.

900 CHAPEL STREET

SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

MOORE, MARGARET G

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,700	Applicant(s) KRUSE ET AL.	
	Examiner Margaret G. Moore	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 to 40, 43, 44 is/are rejected.
- 7) ☒ Claim(s) 41 and 42 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/4/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

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1. Claims 41 and 42 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend upon two different claims simultaneously. See MPEP § 608.01(n). Accordingly claims 41 and 42 have not been further treated on the merits.

2. As an aside the Examiner notes that the language such as “preferably” and “particularly” is not considered to be indefinite (with the exception of claim 30, as noted below) as this only indicates a preferred range. In addition she notes that the limitations following such language are not given any weight since claims are to be given their broadest reasonable interpretation.

3. Claims 3, 4, 7, 15 to 17, 21, 25, 26, 30, 38 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 3, it is unclear what constitutes the “following group of silanes”. The Examiner suggests Markush language.

In claim 4, “molymer” appears to be a typographical error.

In claim 7, it is unclear what is meant by “siloxane filled with particles”. In particular it is unclear what is intended by “filled with”.

In claim 15, it is unclear what is intended by this claim. Specifically, reference to “the monomeric silane” is confusing. Also it is unclear what the molar ratio is intended to reflect. The Examiner cannot examine this claim for prior art purposes as she simply has no idea what is intended by this claim.

In claims 16 and 17, reference to “final curing” is confusing since no such curing step is found in claim 1.

In claim 21, “epoxy resins” is present twice.

In claims 25 and 26, reference to the “Coating composition according to claim 1” lacks antecedent basis.

It is unclear what weight to give claim 30 since it is unclear if the language “preferably” constitutes a definite limitation.

In claim 38, it is unclear if this limits the particular metals to those listed therein or not. In this claim the language "as particulate metal of the group containing..." lacks antecedent basis.

In claim 43, reference to "at least two components I and II" lacks antecedent basis. It is unclear what weight to give this claim.

4. While not indefinite, the Examiner draws attention to claim 33 which requires only .01% by weight of the additive listed. This is an extremely small amount and the Examiner questions whether this is what applicants have actually intended to claim.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 to 12, 14, 16 to 32, 35 to 38 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Herber et al.

Herber et al. teach a coating composition containing at least one polysiloxane. As can be seen on column 2, starting on line 35, the polysiloxane is at least one hydroxy and/or alkoxy functional polysiloxane in the form of an emulsion.

Particular attention is directed to the working examples starting on column 7. This shows a hydroxyl functional silicone resin aqueous emulsion. Such an emulsion meets the requirements of claims 1 to 6, 18 and 19. Please see Table 1, in which such an aqueous emulsion is mixed with particles including a silica suspension meeting claims 7, 10 and 11.

For claims 8, 9 and 12, please see column 3, lines 40 to 60. This teaches the preferred particle size range meeting claims 8 and 9 as well as the fact that sodium or potassium polysilicate can be used with the aqueous emulsion silicone resin. Also note

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that the organosiliconates and silica surface treated with organic groups can be used, meeting claim 14.

For claims 16 and 17, please see the top of column 7.

For claim 20, note that there is no strong acid or base in the working examples and as such they will inherently have a pH within the very broad range claimed.

For claim 21, please see column 5, lines 20 and 21.

For claim 22, note that "up to" includes 0.

For claim 27, note that the working examples include a catalyst.

For claim 28, the water from the aqueous emulsion meets this requirement. Note too that the silane V) in the working examples is adding in water, also meeting this requirement.

For claim 29, please see column 5, line 22, which teaches plasticizer, meeting the claimed lubricating agent. For claim 30 note that this does not actually require that any of these components actually be present.

For claim 31, again see column 5, lines 15 to 20.

The silane in the working examples meets claim 32.

For claims 35 and 36, please see column 5, line 25.

For claims 37 and 38, please see the particulate metals on column 4, line 56.

7. Claims 13, 33, 34 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herber et al.

For claim 13, the Examiner notes that column 3 teaches various colloidal silicas that can be used in this composition. Colloidal silica will either be formed in a basic or acidic system. Having such a limited selection, one having ordinary skill in the art would have found the selection of an acidic silica to have been obvious.

For claim 33, note that column 4, lines 49 and on, teach the addition of a pigment. One having ordinary skill in the art would have been motivated by economic and environmental pressures to use as little pigment as possible while still obtaining useful results in the coating composition of Herber et al. In this manner the skilled artisan would have found such a small amount of pigment to have been within routine

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experimentation of the teachings of Herber et al. For claim 34, please note that aluminum bronze, taught on column 4, meets this requirement.

For claim 38, one having ordinary skill in the art would have been motivated to pick a conventional form of the metallic filler disclosed on column 4, lines 56 and 57. In this manner the skilled artisan would have found the use of aluminum bronze, tin or zinc filler in one of the forms found in claim 39 to have been obvious.

8. Claims 1 to 7, 10, 16, 18 to 31, 35, 40 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Strader.

Strader teaches an aqueous silicone containing coating composition for high temperature appliances. As can be seen on column 1, lines 60 and on, this is an aqueous composition of a silicone resin (which as disclosed on column 2, lines 21 and on as alkoxy free and meets claims 2 to 5, 18), an acrylate copolymer (meeting claim 21), a water soluble solvent (meeting claim 28) and water.

Particular attention is directed to Example 1 to 4. These compositions are acid free (meeting claim 6) and contain a silica filler (meeting claims 7 and 10). The firing temperature is in excess of room temperature, meeting claim 16.

In the Examples, the solids content and pH meet claims 19 and 20. The amount of solvent meets claim 22.

The additives on the bottom of column 3 and found in the working examples meet claims 27 to 31.

For claim 35, note that the working examples include a anti-rust agent.

Column 3, lines 20 to 38, teach a solvent meeting claims 37, 40 and 28.

9. Claims 1, 3, 7 to 11, 13, 16, 17, 19, 20, 22 to 28, 31 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Anthony.

Anthony teaches silicone resin coating compositions containing an aqueous dispersion of silica and a silicone resin. See column 2, lines 40 and on, which teach hydrolyzing silanes meeting claim 3 to form a silicone resin. See also column 3, lines

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61 and on. The top of column 4 teaches the requirement of claims 7 to 11. This also teaches an acidic colloidal silica (line 22) meeting claim 13.

For claims 16, 17 and 20, please see column 6, lines 35 to 40.

For claim 19 see column 5, line 40.

For claims 22 to 28 and 31, see the various additives disclosed on column 6, line 10, through column 7. See also the solvents disclosed on column 5, lines 25 to 30.

10. Claims 1 to 5, 7 to 11, 13, 16 to 20, 22 to 28, 43 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Chikuni et al.

Chikuni et al. teach a coating composition comprising a silicone resin and a photocatalyst dispersed therein. Particularly, see column 8, lines 39 and on, in which the silicone resin and the photoparticles (dispersed in a aqueous system) are packaged as a two part composition. This meets claims 1, 7 and 43.

Please see the working examples, for instance siloxane solution #3 prepared on column 17. This shows a silicone resin meeting claims 2 to 5 and 18 and an acidic silica dispersion meeting claims 7 to 11 and 13.

For claims 16 and 17 please see column 19, line 49.

11. Claims 1, 3, 4, 6, 7, 16 to 20, 22 to 27, 28, 37 to 40, 42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Grulke et al.

Grulke et al. teach an aqueous silicone resin coating composition. See for instance the working examples starting on the bottom of column 4 through column 5, This anticipates claims 1, 3, 4, 6 and 7.

For claims 22 and 28, please see the top of column 4 which teaches the presence of acetylenic glycol, meeting these requirements.

For claims 37 to 40, please note that laminar aluminum past in mineral spirits or isopropanol on column 3, lines 25 to 45.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-

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272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Margaret G. Moore/
Primary Examiner, Art Unit 1796

mgm
4/16/10